TABLE 97

Motivation for cloud-based computing systems and applications technology adoption and utilization for companies using the technology, by industry: 2016–18

(Number and percent)

Industry	NAICS code	Companies (number)	To automa tasks perforn by lab	s ned	To upgrade outdated processe or methods	l of s processe or	re / ra	To expan the ange goods or ervice	of s	To add standa and accredit	rds	Some other reason
All industries	11, 21-23, 31-33, 42-81	1,549,065	15.6		43.3	49.2	1	14.1		10.4		23.5
Manufacturing industries	31-33	62,089	13.5		47.4	45.9	1	12.1		9.6		24.7
Food	311	4,433	14.5		41.7	44.8	1	10.2		9.9		29.1
Beverage and tobacco products	312	3,754	15.4		44.1	45.8	1	11.0		8.5		24.1
Textile, apparel, and leather products	313-16	2,586	13.0		44.9	44.0		9.6		6.0		30.6
Wood products	321	2,002	10.3		44.0	36.9		9.5		2.9		38.1
Paper	322	785	14.0	r	54.9	61.9	1	19.5		13.2	r	13.4
Printing and related support activities	323	8,725	13.0		47.2	44.8	1	14.8		7.1		27.0
Petroleum and coal products	324	235	28.5	r	44.3	25.5 r		8.1	r	14.0	r	27.7
Chemicals	325	2,484	18.6		49.8	50.3	_	12.0		10.5		18.8
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	194	26.8	r	54.1 r	54.1 r		0.0		D		10.3
Pharmaceuticals and medicines	3254	520	19.8		57.5	54.0	1	13.7		18.3		18.5
Soap, cleaning compound, and toilet preparation manufacturing	3256	560	14.3		44.8	42.1	2	21.3	r	7.5		25.0
Other chemicals	other 325	1,211	18.7		48.1	51.9		9.2		6.9		17.7
Plastics and rubber products	326	2,722	11.6		55.8	55.0	1	13.0		15.7		18.7
Nonmetallic mineral products	327	1,720	8.2		51.7	42.7		7.3		8.3		27.0
Primary metals	331	826	7.9		54.0	34.4		5.4		16.7	r	26.5
Fabricated metal products	332	10,845	11.8		46.7	46.3		7.5		10.4		23.9
Machinery	333	5,611	16.7		51.0	45.4	1	11.7		15.5		20.9
Computer and electronic products	334	3,186	12.9		40.8	46.2	2	25.0		10.3		23.2
Communications equipment	3342	332	8.7		45.5	64.2	4	41.0		11.1	r	16.3
Semiconductor and other electronic components	3344	1,019	9.3		46.4	44.9	2	20.5		11.4		23.2
Navigational, measuring, electromedical, and control instruments	3345	1,270	14.9		35.5	44.7	2	25.1		10.6		26.5
Other computer and electronic products	other 334	566	17.0		39.2	41.3	2	23.9		7.2		20.0
Electrical equipment, appliances, and components	335	1,287	15.5		55.9	49.3		9.9		6.3		19.9
Transportation equipment	336	1,908	16.5		47.3	52.7	1	12.4		12.0		21.4
Automobiles, bodies, trailers, and parts	3361-63	1,250	18.2		45.6	54.0	-	12.3		12.0	r	18.2
Aerospace products and parts	3364	336	16.4		52.4	50.0	1	15.2		13.7		26.8
Other transportation	other 336	322	10.2		48.8	50.0		9.3	r	10.9		28.0
Furniture and related products	337	2,612	16.9		51.5	44.3		13.1		7.8		25.7
Miscellaneous	339	6,366	12.1		46.2	45.3		15.3		7.2		24.4
Medical equipment and supplies	3391	2,037	13.7		47.9	44.8	2	22.6		13.2		22.0
Other miscellaneous manufacturing	3399	4,328	11.3		45.5	45.5	1	11.9		4.4		25.6
Nonmanufacturing industries	11, 21-23, 42-81	1,486,975	15.7		43.1	49.4	1	14.1		10.4		23.5
Agriculture, forestry, fishing, and hunting	11	3,162	20.5		47.6	30.7		D		2.7	r	28.0
Mining, extraction, and support activities	21	2,902	15.3		46.7	41.5		4.2	r	4.2	r	34.1

TABLE 97

Motivation for cloud-based computing systems and applications technology adoption and utilization for companies using the technology, by industry: 2016–18

(Number and percent)

		Companies	To automate tasks performed	processes or	or	To expand the range of goods or	To adopt standards and	Some other
Industry	NAICS code	(number)	by labor	methods	methods		accreditation	reason
Utilities	22	863	19.1	32.0	54.6	8.2	2.9	22.1
Construction	23	138,956	13.2	43.5	45.1	9.4	5.9	26.4
Wholesale trade	42	77,394	12.4	45.2	47.2	12.4	6.2	24.3
Retail trade	44-45	131,408	14.3	44.1	46.9	13.9	7.7	23.2
Transportation and warehousing	48-49	35,253	13.7	44.6	49.4	11.1	8.4	24.5
Information	51	35,649	19.2	41.4	57.7	28.7	10.4	20.4
Publishing	511	10,769	18.8	47.3	58.3	32.5	10.3	18.6
Newspaper, periodical, book, and directory publishers	5111	5,125	13.0	48.1	51.7	14.9	4.2	21.9
Software publishers	5112	5,641	24.0	46.7	64.2	48.6	15.8	15.5
Telecommunications	517	3,512	26.0	39.4	58.4	26.9	10.1	22.2
Data processing, hosting, and related services	518	6,317	28.2	48.5	62.9	41.7	18.0	16.3
Other information	other 51	15,053	14.2	34.6	54.9	21.0	7.2	23.0
Finance and insurance	52	97,142	16.9	47.9	55.7	13.9	11.5	18.4
Real estate and rental and leasing	53	96,310	15.2	43.3	50.9	10.1	7.6	23.4
Lessors of nonfinancial intangible assets (except copyrighted works)	533	807	24.3 r	68.5	73.2	19.1	D	D
Other real estate and rental and leasing	other 53	95,502	15.1	43.1	50.7	10.0	7.7	23.6
Professional, scientific, and technical services	54	363,059	16.8	42.7	52.4	20.0	9.4	23.9
Legal services	5411	79,712	14.3	43.9	50.4	9.0	7.3	28.8
Accounting, tax preparation, bookkeeping, and payroll services	5412	57,578	16.0	40.4	50.3	19.9	9.6	23.4
Architectural, engineering, and related services	5413	40,928	14.6	40.1	49.6	14.3	7.5	26.0
Specialized design services	5414	13,714	13.5	39.6	47.7	15.4	7.4	27.4
Computer systems design and related services	5415	63,324	22.4	45.8	61.6	41.6	15.9	17.3
Management, scientific, and technical consulting services	5416	64,022	19.1	41.6	52.0	18.4	8.0	23.0
Scientific research and development services	5417	4,188	16.6	37.8	55.9	21.2	14.4	26.7
Advertising, public relations, and related services	5418	15,388	14.9	45.0	53.3	19.1	6.2	21.7
Other professional, scientific, and technical services	5419	24,167	13.1	43.7	46.9	17.2	8.7	24.3
Management of companies and enterprises	55	806	13.2 r	52.7	61.9	21.3 r	D	5.1
Administrative and support and waste management and remediation services	56	85,414	17.8	46.3	50.5	12.9	7.5	21.9
Educational services	61	23,127	16.3	40.7	50.3	16.7	8.9	26.1
Health care and social assistance	62	202,410	16.2	40.4	48.9	9.6	24.5	22.3
Health care services	621-23	184,835	15.8	40.0	48.5	9.1	25.5	22.6
Social assistance	624	17,574	20.6	44.7	53.4	14.6	14.4	19.5

TABLE 97

Motivation for cloud-based computing systems and applications technology adoption and utilization for companies using the technology, by industry: 2016–18

(Number and percent)

Industry	NAICS code	Companies (number)	To automate tasks performed by labor		To improve quality or reliability of processes or methods	To expand the range of goods or services	To adopt standards and accreditation	Some other reason
Arts, entertainment, and recreation	71	28,512	12.8	36.0	47.0	12.8	5.4	27.1
Accommodation and food services	72	94,504	16.4	43.2	43.2	11.7	7.9	23.9
Other services	81	70,105	14.8	40.6	43.8	14.0	7.6	24.7

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s)

Detail may not add to total because of rounding. Detail may exceed total because companies could select more than one response. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that reported a low, moderate, or high use of the technology (see Table 86).

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.